

IN THE CLAIMS:

Please amend the claims as follows:

C1
Sub D1
1. (Amended) A method for the detection of a demyelinating disease comprising:
a) providing: i) a sample from a human suspected of having a demyelinating disease, and ii) iron binding protein;
b) reacting said sample with said iron binding protein in vitro; and
c) measuring the extent of binding of said iron binding protein to said sample, under conditions such that a demyelinating disease is detected.

C2
8. (Amended) The method of Claim 7, wherein said marker is selected from the group consisting of radioisotope and [florescent] fluorescent dye.

C3
10 (Amended) The method of Claim 1, wherein said measuring [if] is performed with a technique selected from the group of autoradiography and immunofluorescence.

Please add the following claims:

Rule 1.126 Sub D3
C4
11. (New) A method for the detection of a demyelinating disease comprising:
a) providing: i) a sample from a human suspected of having a demyelinating disease, and ii) iron binding protein wherein said iron binding protein is linked to a detectable marker;
b) reacting said sample with said iron binding protein in vitro; and
c) measuring the extent of binding of said iron binding protein to said sample, under conditions such that a demyelinating disease is detected.

18. 12. (New) The method of Claim 11, wherein said sample is brain tissue.

Sub E⁴
~~19. 13.~~ (New)
via surgical biopsy.

~~The method of Claim 12, wherein said brain tissue is collected~~

~~20. 14.~~ (New)
ferritin.

~~The method of Claim 11, wherein said iron binding protein is~~

~~21. 15.~~ (New)

~~The method of Claim 14, wherein said ferritin is native.~~

~~22. 16.~~ (New)

~~The method of Claim 14, wherein said ferritin is recombinant.~~

CN7
~~23. 17.~~ (New)

~~The method of Claim 11, wherein said marker is selected from the group consisting of radioisotope and florescent dye.~~

C4
~~24. 18.~~ (New)

~~The method of Claim 17, wherein said radioisotope is ¹²⁵I.~~

~~25. 19.~~ (New)

~~The method of Claim 11, wherein said measuring is performed with a technique selected from the group of autoradiography and immunofluorescence.~~

~~26. 20.~~ (New)
comprising:

~~A method for the detection of a demyelinating disease~~

- ~~a) providing i) a sample from a human suspected of having a demyelinating disease, and ii) an antibody reactive with an iron binding protein;~~
- ~~b) reacting said sample with said antibody in vitro; and~~
- ~~c) measuring the extent of binding of said antibody to said sample, under conditions such that a demyelinating disease is detected.~~

~~27. 21.~~ (New)

~~The method of Claim 20, wherein said sample is brain tissue.~~

~~28. 22.~~ (New)

~~The method of Claim 21, wherein said brain tissue is collected via surgical biopsy.~~